

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Mueller et al.

Application No. Unassigned

Filed: September 11, 2003

Group Art Unit: Unassigned

Examiner: Unassigned

For: SYSTEM FOR THE PREFERENTIAL
REMOVAL OF SILICON OXIDE

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Pursuant to 37 CFR 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 and/or Substitute Form PTO-1449 ("Form 1449") are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form 1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form 1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

The Information Disclosure Statement is being filed:

- ☒ **within** any one of the following time periods: (a) within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d); (b) within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 of an international application; (c) before the mailing date

of a first Office Action on the merits; or (d) before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

- ☐ **after** (a), (b), (c) or (d) above, but before the mailing date of a final action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and includes *one* of:

☐ the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below).

or

☐ the fee of \$180 set forth in 37 CFR 1.17(p) (see "Fees" below).

- ☐ **after** the mailing date of a final action under 37 CFR 1.113 or a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and on or before payment of the issue fee, and includes the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below).

- ☐ **after** the mailing date of a Notice of Allowance under 37 CFR 1.311, and on or before payment of the issue fee, and **within** thirty days of receiving each item of information contained in the Information Disclosure Statement, and includes the Statement under 37 CFR 1.704(d) (see "Statement under 37 CFR 1.704(d)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below).

NOTE: This is for original applications except applications for a design patent, filed on or after May 29, 2000, wherein a paper containing only an Information Disclosure Statement in compliance with 37 CFR 1.97 and 1.98 is being filed.

Copies of the References

- ☒ Copies of the references listed on the enclosed Form 1449 are enclosed herewith. Attached to each reference not in the English language is a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3). An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3).

- ☒ A copy of the foreign search report is enclosed herewith.

- ☐ The references listed on the enclosed Form 1449 were previously identified in the parent application(s) of the present application, and copies of the references were furnished at that time. Accordingly, additional copies of the references are not submitted herewith, so as not to burden the file with duplicate copies of references. The Examiner is respectfully requested to carefully review the references in accordance with the requirements set out in the Manual of Patent Examining Procedure. In accordance with 37 CFR 1.98(d), the details of the parent application(s) relied upon for an earlier filing date under 35 USC 120 in which copies of the references were previously furnished are set out below:

U.S. APPLICATIONS		Status (<i>check one</i>)		
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1.				
2.				
3.				

Statement under 37 CFR 1.97(e)

- ☐ The **undersigned** hereby states that each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.
- ☐ The **undersigned** hereby states that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

Statement under 37 CFR 1.704(d)

- ☐ The **undersigned** hereby states that each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

Fees

- ☒ No fee is owed by the applicant(s).
- ☐ The **IDS Fee of \$180** under 37 CFR 1.17(p) is enclosed herewith.

Method of Payment of Fees

- ☐ Attached is a check in the amount of \$.
- ☐ Charge Deposit Account No. 12-1216 in the amount of \$. (A duplicate copy of this communication is enclosed for that purpose.)

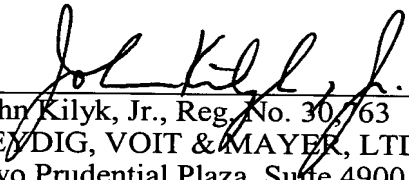
Authorization to Charge Additional Fees

- ☒ If any additional fees are owed in connection with this communication, please charge Deposit Account No. 12-1216. (A duplicate copy of this communication is enclosed for that purpose.)

In re Appln. of Mueller et al.
Application No. Unassigned


Instructions as to Overpayment

- ☒ Credit Account No. 12-1216.
☐ Refund



John Kilyk, Jr., Reg. No. 30,763
LENDIG, VOIT & MAYER, LTD.
Two Prudential Plaza, Suite 4900
180 North Stetson
Chicago, Illinois 60601-6780
(312) 616-5600 (telephone)
(312) 616-5700 (facsimile)


Date: September 11, 2003

Please type a plus sign (+) inside this box → 

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known		
				Application Number	Unassigned	
				Filing Date	September 11, 2003	
				First Named Inventor	Mueller et al.	
				Group Art Unit	Unassigned	
Examiner Name	Unassigned					
Attorney Docket Number	00001CONX224367					
Sheet	1	of	2			

U.S. PATENT DOCUMENTS

Examiner Initials	Doc. No.	U.S. Patent Document		Name of Patentee or Applicant	Date of Publication	Filing Date If Appropriate
		Application or Patent Number	Kind Code			
	AA	3,328,141		Lachapelle	June 27, 1967	
	AB	3,385,682		Lowen	May 28, 1968	
	AC	3,429,080		Lachapelle	Feb. 25, 1969	
	AD	3,615,955		Regh et al.	Oct. 26, 1971	
	AE	3,887,403		Coggins	June 3, 1975	
	AF	3,930,870		Basi	Jan. 6, 1976	
	AG	4,169,337		Payne	Oct. 2, 1979	
	AH	4,332,649		Sälzle	June 1, 1982	
	AI	4,343,116		Murphy et al.	Aug. 10, 1982	
	AJ	4,462,188		Payne	July 31, 1984	
	AK	4,555,304		Sälzle	Nov. 26, 1985	
	AL	4,671,851		Beyer et al.	June 9, 1987	
	AM	4,954,141		Takiyama et al.	Sept. 4, 1990	
	AN	4,983,650		Sasaki	Jan. 8, 1991	
	AO	5,139,571		Deal et al.	Aug. 18, 1992	
	AP	5,169,491		Doan	Dec. 8, 1992	
	AQ	5,176,752		Scheiner	Jan. 5, 1993	
	AR	5,182,221		Sato	Jan. 26, 1993	
	AS	5,246,624		Miller et al.	Sept. 21, 1993	
	AT	5,387,361		Kohara et al.	Feb. 7, 1995	
	AU	5,407,526		Danielson et al.	April 18, 1995	
	AV	5,478,436		Winebarger et al.	Dec. 26, 1995	
	AW	5,494,857		Cooperman et al.	Feb. 27, 1996	
	AX	5,498,565		Gocho et al.	March 12, 1996	
	AY	5,516,346		Cadien et al.	May 14, 1996	
	AZ	5,614,444		Farkas et al.	March 25, 1997	
	BA	5,690,807		Clark, Jr. et al.	Nov. 25, 1997	
	BB	5,700,383		Feller et al.	Dec. 23, 1997	
	BC	5,720,823		Carlson et al.	Feb. 24, 1998	
	BD	5,721,173		Yano et al.	Feb. 24, 1998	
	BE	5,769,689		Cossaboon et al.	June 23, 1998	
	BF	5,769,691		Fruitman	June 23, 1998	
	BG	5,783,495		Li et al.	July 21, 1998	
	BH	5,855,811		Grieger et al.	Jan. 5, 1999	
	BI	5,860,848		Loncki et al.	Jan. 19, 1999	
	BJ	5,863,838		Farkas et al.	Jan. 26, 1999	
	BK	5,938,505		Morrison et al.	Aug. 17, 1999	
	BL	5,993,686		Streinz et al.	Nov. 30, 1999	
	BM	6,019,806		Sees et al.	Feb. 1, 2000	
	BN	6,046,112		Wang	April 4, 2000	
	BO	6,121,143		Messner et al.	Sept. 19, 2000	
	BP	6,238,829	B1	Seki	May 29, 2001	
	BQ	6,267,644	B1	Molnar	July 31, 2001	
	BR	6,291,349	B1	Molnar	Sept. 18, 2001	

Please type a plus sign (+) inside this box → 

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	Unassigned
				Filing Date	September 11, 2003
				First Named Inventor	Mueller et al.
				Group Art Unit	Unassigned
				Examiner Name	Unassigned
Sheet	2	of	2	Attorney Docket Number	00001CONX224367

FOREIGN PATENT DOCUMENTS								
Examiner Initials	Doc. No.	Foreign Patent Document			Name of Patentee or Applicant	Date of Publication	Translation	
		Office	Application or Patent Number	Kind Code			Yes	No**
	B S	EP	0 373 501	B1	E.I. DU PONT DE NEMOURS AND COMPANY	March 8, 1995		
	B T	EP	0 853 110	A1	TEXAS INSTRUMENTS INCORPORATED	July 15, 1998		
	B U	EP	0 853 335	A2	TEXAS INSTRUMENTS INCORPORATED	July 15, 1998		
	B V	EP	0 926 715	A2	TEXAS INSTRUMENTS INCORPORATED	June 30, 1999		
	B W	WO	97/47030	A1	CABOT CORPORATION	Dec. 11, 1997		
	B X	WO	99/62628	A1	ANGUS CHEMICAL COMPANY	Dec. 9, 1999		
	B Y	WO	00/00560	A1	CABOT CORPORATION	Jan. 6, 2000		

OTHER - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Doc. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Translation	
			Yes	No**
	B Z	COOK, "Chemical Processes in Glass Polishing," <i>Journal of Non-Crystalline Solids</i> , 120, 152-171 (1990)		
	C A	HYASHI et al., "Ammonium-Salt-Added Silica Slurry for the Chemical Mechanical Polishing of the Interlayer Dielectric Film Planarization in ULSI's," <i>Jpn. J. Appl. Phys.</i> , 34 (2B), pt. 1 (1995)		
	C B	<i>Angus Chemical Company Technical Data Sheet</i> , DMAMP-80, TDS 18 (1994)		
	C C	HOLLAND et al., "Controlling Dielectric Removal Rate and Uniformity in Several New CMP Processes," <i>First International Dielectrics for VLSI/USLI Multilevel Interconnection Conference (DUMIC)</i> , Santa Clara, CA (February 21-22, 1995)		
				</

Examiner Signature	Date Considered
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* A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).
 + An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).